



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,864	09/22/2003	Alban Couturier	Q77097	4309
23373	7590	03/18/2008	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			CHANKONG, DOHM	
ART UNIT	PAPER NUMBER		2152	
MAIL DATE	DELIVERY MODE			
03/18/2008	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/664,864	Applicant(s) COUTURIER ET AL.
	Examiner DOHM CHANKONG	Art Unit 2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 11 December 2007.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-37 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-9, 11-24 and 26-37 is/are rejected.

7) Claim(s) 10 and 25 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/136/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

1> This action is in response to Applicant's amendment, filed 12.11.2007. Claims 1-37 are amended. Claims 1-37 are presented for further examination.

2> This is a final rejection.

Response to Arguments

3> As to the §102 rejection of claims 1, 2, 15-17, and 31-36 under Wan, Applicant argues that Wan fails to teach "duplicating at least part of each of said control packets." Applicant argues that Wan fails to expressly teach that information from the Wan's RTC packets that are forwarded to a monitoring server are a "duplicated part of each of said control packets." Applicant's arguments are not persuasive.

Wan discloses extracting information from the RTC packets and forwarding this extracted information to a central server for analysis [column 4 «lines 63-67»]. One of ordinary skill in the art would reasonably interpret that the extracted information reads on Applicant's claimed "duplicated" information. That is, extracting and subsequently forwarding information from a packet corresponds in functionality to duplicating the information from a packet as claimed by Applicant. For this reason, Applicant's argument is not persuasive.

Applicant also argues that Wan also does not teach the limitations of claim 7 which require duplicating the entire intercepted control packet. Claim 7 was rejected under §103(a) as being unpatentable over Wan, in view of Grabelsky. While Applicant's arguments are

persuasive as to the Wan reference, Grabelsky discloses the claimed limitation. For example, Grabelsky discloses that an entire RTCP is duplicated and forwarded over the network as well as to a monitoring process [column 12 «lines 47-50»]. This teaching corresponds to duplicating "the whole of each intercepted packet."

Claim 7 was also rejected under Wan, in view of Hepworth. Hepworth also discloses duplicating and forwarding the whole intercepted packet [0040]. Therefore, Applicant's arguments are also not persuasive as to the Wan and Hepworth rejections. As to the §103 rejections, Applicant relies on the arguments made with respect to the §102 rejection under Wan which were addressed above.

4> As to the §112 rejection of claims 6 and 7, Applicant cites a section of the MPEP to support the position that the term "substantially greater" would have been understood by one of ordinary skill in the art in light of Applicant's specification. However, Applicant's specification is entirely devoid of any description that would have allowed one of ordinary skill in the art to have understood the meaning of the relative term "substantially." The specification merely echoes the context in which the term "substantially greater" is used in the claim without explaining how to interpret "substantially." For example is 5 substantially greater or simply greater than 1? Is 15 substantially greater than 1? Since Applicant fails to provide any guidance as to how to interpret the term, one of ordinary skill in the art would not have been able to understand what was meant in the claim. Therefore, the §112 rejection of claims 6 and 7 is maintained. Claims 8, 14, 21-23, and 29 are rejected for the same reasons as set forth for claims 6 and 7.

Allowable Subject Matter

5> Claims 10 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6> Claims 6-8, 14, 21-23, and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claims 6-8, 14, 21-23, and 29 are rejected for being unclear; they recite the feature whereby part of a packet is duplicated only if one value is "substantially greater" than a threshold value. The term "substantially" is a relative term which renders the claim indefinite. The term is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. As such, there is no guidance as to how much greater the value needs to be over the threshold value for a packet to be duplicated.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7> Claims 1, 2, 15-17 and 31-36 are rejected under 35 U.S.C. §102(a) as being anticipated by Wan et al, U.S Patent No. 6,529,475 [“Wan”].

8> As to claim 1, Wan discloses a method for intercepting data exchanged by remote terminals, via a communications network, said data including control packets formatted according to a first real-time data transfer control protocol and associated with data previously exchanged by the said terminals [Figure 3 «items 201, 202»], the method comprising:

- a. intercepting at least certain data packets of a transfer between at least two remote terminals, during said transfer, so as to determine which of said data packets are control packets, said control packets being formatted according to said first protocol [column 6 «lines 26-44» : “differentiate the packets and scan only the RTCP packets within the data traffic”];
- b. duplicating at least part of each of said control packets [column 8 «lines 21-37» : “these monitors send the information received from the RTCP packets to central server” where this functionality is analogous to duplicating the information within the RTCP packets]; and

c. communicating data representing said duplicated part of each of said control packets to a control application located in said network, said control application deducing information on said transfer from said communicated data [column 8 «lines 6-57» : the congestion monitors forward RTCP information to a central server which uses the information to determine congestion status of the network].

9> As to claim 2, Wan discloses that all the control packets of said transfer between at least two remote terminals are intercepted [column 8 «lines 42-46»].

10> As to claim 15, Wan discloses that the whole of each intercepted control packet formatted according to the first protocol is duplicated [column 8 «lines 21-37» where : the entire packet is forwarded].

11> As to claim 16, as it does not teach or further define over the limitations of claim 1, claim 16 is similarly rejected for at least the same reasons set forth for claim 1.

12> As to claim 17, Wan discloses the interception means intercepts all control packets transferred [column 6 «lines 45-49»].

13> As to claim 31, Wan discloses an interception means located in at least one of the items of network equipment through which the streams intended for the said terminals flow [Figure 2 «items 110, 100»].

14> As to claim 32, Wan discloses that the said management means are located in at least one of the items of equipment in the network to which the said terminals are connected [Figure 2 | Figure 3 «item 203»].

15> As to claim 33, Wan discloses the network equipment is chosen is from a group comprising routers, NAT boxes, firewalls and traffic shapers [column 2 «lines 40-48»].

16> As to claims 34 and 35, Wan discloses network chosen from amongst public and private networks, in that the network is the Internet [column 2 «lines 18-24»].

17> As to claim 36, Wan discloses that the first protocol is called RTCP, and is associated with a real-time data transfer protocol called RTP [column 3 «lines 63-67» | column 4 «lines 61-67»].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18> Claims 3 and 18 are rejected under 35 U.S.C §103(a) as being unpatentable over Wan, in view of Kohler, Jr. et al, U.S Patent Application No. 2002/0032774 [“Kohler”].

19> As to claim 3, Wan does not expressly disclose intercepting only one sample amongst n. However, sampling packets, or every “n” packets, where “n” is an integer is a well known feature in the art. For example, Kohler discloses sampling one packet in every “n” packets for the purpose of collecting statistics about the network [0033]. Such a feature is well known in the art for providing efficiency improvements to packet collectors because not every packet must be collected to gather statistics about the network. Thus, it would have been obvious to one of ordinary skill in the art to incorporate Kohler’s packet sampling functionality into Wan to improve upon Wan’s packet collecting efficiency.

20> As to claim 18, as it does not teach or further define over the limitations of claim 3, claim 18 is rejected for at least the same reasons set forth for claim 3.

21> Claims 4, 5, 19 and 20 are rejected under 35 U.S.C §103(a) as being unpatentable over Wan, in view of Bar et al, U.S Patent No. 6,122,665 [“Bar”].

22> As to claim 4, Wan does disclose differentiating between RTCP packet format and other packet formats [column 6 «lines 45-49»] but does not expressly disclose that the determination of the formatting concerns the determination of those packets in which at least a network address field for the terminal which sent the packet, a network address field

for the destination terminal of the packet, a destination port field and/or a source port filed and a protocol number field have chosen values.

23> Bar discloses that the determination of a control packet's format concerns the determination of those packets in which at least a network address field for the terminal which sent the packet, a network address field for the destination terminal of the packet, a destination port field and/or a source port filed and a protocol number field have chosen values [Figure 3A | Figure 4D | column 3 «lines 50-53» | column 9 «lines 50-55» | column 12 «lines 21-32»]. It would have been obvious to one of ordinary skill in the art to incorporate Bar's means of differentiating between different packet formats such as RTCP into Wan's system.

Wan already disclosed differentiating between RTCP packets and other packets but is simply silent as to how the congestion monitors achieved this functionality. Bar supplements Wan's functionality by providing an express teaching of how to differentiate between such packets by looking at the packet header to determine the protocol.

24> As to claim 5, Wan does not expressly disclose an application or an item of equipment communicating the chosen values. Bar does disclose this feature [Figure 4D]. It would have been obvious to one of ordinary skill in the art to incorporate Bar's means of differentiating between different packet formats such as RTCP into Wan's system.

25> As to claim 19, as it does not teach or further define over the limitations of claim 4, claim 19 is similarly rejected for at least the same reasons set forth for claim 4.

26> As to claim 20, as it is merely a device that implements the method of claim 5, claim 20 is similarly rejected for at least the same reasons set forth for claim 5.

27> Claims 6-9, 11, 12, 14, 21-23, 25, 26, and 29 are rejected under 35 U.S.C §103(a) as being unpatentable over Wan, in view of Hepworth et al, U.S Patent Application No. 2003/0120789 [“Hepworth”].

28> As to claims 6 and 7, Wan does disclose duplicating (forwarding) at least part of (claim 6) of each packet but does not expressly disclose the other limitations of claims 6 and 7 such as forwarding the whole of the packet and comparing a chosen threshold value and the value of a service information field in order to duplicate the part of the control packet in which the service information field has a value greater than the said threshold value. However, such a feature was well known in the art at the time of Applicant's invention. Hepworth discloses a system for monitoring a multi-party session using selected information from a RTCP packet [abstract]. Hepworth further discloses comparing a chosen threshold value and the value of a service information field in order to duplicate the part of or the whole of each control packet in which the service information field has a value greater than the said threshold value [0040 | claim 19 where : Hepworth checks the “flag's value” and if the value is set to a predetermined value, then duplicating the packet].

It would have been obvious to one of ordinary skill in the art to modify Wan's forwarding functionality with Hepworth's teachings to include the comparison of the flag value feature. One would have been motivated to provide such a modification to increase the Wan's functionality to insure that that duplicated packets are forwarded to appropriate destinations [see Hepworth, 0040].

29> As to claims 8 and 9, Wan does not expressly disclose that certain chosen fields in each control packet, formatted according to the first protocol and in which the service information field has a value greater than the said threshold value, are duplicated, and in that the said duplicated fields are communicated (claim 8) and where one of the duplicated fields is the service information field (claim 9). However, such a feature was well known in the art at the time of Applicant's invention. Hepworth discloses comparing a chosen threshold value and the value of a service information field in order to duplicate the part of or the whole of each control packet in which the service information field has a value greater than the said threshold value [0040 | claim 19 where : Hepworth checks the "flag's value" and if the value is set to a predetermined value, then duplicating the packet] and wherein certain chosen field in each control packet, formatted according to the first protocol and in which the service information field has a value greater than the said threshold value, are duplicated, and in that the said duplicated fields are communicated and wherein one of the duplicated fields is the service information field [0040 | claim 19 where : Hepworth discloses that the entire RTCP packet is duplicated including all of the fields and the service information field].

It would have been obvious to one of ordinary skill in the art to modify Wan's

forwarding functionality with Hepworth's teachings. One would have been motivated to provide such a modification to increase the Wan's functionality to insure that that duplicated packets are forwarded to appropriate destinations [see Hepworth, 0040].

30> As to claims 11 and 12, as they do not teach or further define over the limitations of claims 8 and 9, claims 11 and 12 are rejected for at least the same reasons set forth for claims 8 and 9.

31> As to claims 14 and 29, Wan does not expressly disclose certain chosen fields, such as network address field for the terminal which sent the packet, said network address field for the destination terminal of the packet, destination port field, and said detected protocol number field are duplicated and communicated. However, such a feature was well known in the art at the time of Applicant's invention. Hepworth discloses duplicating certain chosen fields [0029] including the source network address, destination address (which includes the port information) and protocol field [0016-0020 where : one of ordinary skill in the art would interpret session information associated with the session as including the protocol for the session | 0032, 0040]. It would have been obvious to one of ordinary skill in the art to have modified Wan to include Hepworth's teaching for duplicating chosen fields within an RTCP packet. Hepworth discloses that such a feature enhances systems such as Wan by preventing confusion from concurrent sessions and incorrect analysis of performance data [0023].

32> As to claims 21-23 and 25, as they merely claim a device that implements the method of claims 6-8 and 10 respectively, they are similarly rejected for at least the same reasons set forth for claims 6-8 and 10, respectively.

33> As to claim 26, as it merely claims a device that implements the method of claims 8 and 9, claim 26 is rejected for at least the same reasons set forth for claims 8 and 9.

34> Claims 6-9, 11, 12, 21-23, 25 and 26 are rejected under 35 U.S.C §103(a) as being unpatentable over Wan, in view of Grabelsky et al, U.S Patent No. 6,678,250 [“Grabelsky”].

35> As to claims 6 and 7, Wan does disclose duplicating (forwarding) at least part of (claim 6) of each packet but does not expressly disclose the other limitations of claims 6 and 7 such as forwarding the whole of the packet and comparing a chosen threshold value and the value of a service information field in order to duplicate the part of the control packet in which the service information field has a value greater than the said threshold value.

However, such a feature was well known in the art at the time of Applicant's invention.

Grabelsky discloses a system for monitoring a networks using selected information from a RTCP packet [abstract]. Grabelsky further discloses performing a comparison between a chosen threshold value and the value of a service information field in order to duplicate the part of or the whole of each control packet in which the service information field has a value greater than said threshold value [column 10 «lines 64-66» | column 11 «lines 46-66» | column 12 «lines 47-50» where : Grabelsky discloses copying the entire report included in the packet,

where the report includes network information (figure 3) as well as duplicating the entire packet].

It would have been obvious to one of ordinary skill in the art to modify Wan to include Grabelsky's threshold monitoring functionality. One would have been motivated to provide such a modification to Wan's system to increase the monitoring functionality of Wan's system and improving the ability to monitor network performance parameters.

36> As to claims 8 and 9, Wan does not expressly disclose that certain chosen fields in each control packet, formatted according to the first protocol and in which the service information field has a value greater than the said threshold value, are duplicated, and in that the said duplicated fields are communicated (claim 8) and where one of the duplicated fields is the service information field (claim 9). However, such a feature was well known in the art at the time of Applicant's invention. Grabelsky discloses performing a comparison between a chosen threshold value and the value of a service information field contained in the intercepted control packet [column 10 «lines 64-66» | column 11 «lines 46-66» | column 12 «lines 47-50»] and wherein certain chosen field in each control packet, formatted according to the first protocol and in which the service information field has a value greater than the said threshold value, are duplicated, and in that the said duplicated fields are communicated and wherein one of the duplicated fields is the service information field [Figure 3 | column 10 «lines 64-66» | column 11 «lines 46-66» where : Grabelsky discloses copying the entire report included in the packet, where the report includes network information (figure 3)].

It would have been obvious to one of ordinary skill in the art to modify Wan to

include Grabelsky's threshold monitoring functionality. One would have been motivated to provide such a modification to Wan's system to increase the monitoring functionality of Wan's system and improving the ability to monitor network performance parameters.

37> As to claims 11 and 12, as they do not teach or further define over the limitations of claims 8 and 9, claims 11 and 12 are rejected for at least the same reasons set forth for claims 8 and 9.

38> As to claim 13, Wan does not expressly disclose the service information field comprises data representing the quality of service. However, such a feature was well known in the art at the time of Applicant's invention. Grabelsky discloses the service information field comprises data representing the quality of service [column 11 «lines 46-66»]. It would have been obvious to one of ordinary skill in the art to modify Wan to include Grabelsky's threshold monitoring functionality. One would have been motivated to provide such a modification to Wan's system to increase the monitoring functionality of Wan's system and improving the ability to monitor network performance parameters.

39> As to claims 21-23 and 25, as they merely claim a device that implements the method of claims 6-8 and 10 respectively, they are similarly rejected for at least the same reasons set forth for claims 6-8 and 10, respectively.

40> As to claims 26 and 27, as they are merely claims to a device that implements the method of claims 8 and 9, claims 26 and 27 are rejected for at least the same reasons set forth for claims 8 and 9.

41> As to claim 30, as it is merely a claim to a device that implements the method of claim 7, claim 30 is rejected for at least the same reasons set forth for claim 7.

42> Claim 37 is rejected under 35 U.S.C §103(a) as being unpatentable over Wan, in view of Roh et al, U.S Patent Application No. 2004/0148417 [“Roh”].

43> As to claim 37, Wan does not expressly disclose that the duplicated data are communicated according to a protocol chosen from a group comprising the COPS and SNMP protocols, and the encapsulation protocols.

44> Roh discloses communicating duplicated data according to SNMP [0083, 0089]. It would have been obvious to one of ordinary skill in the art to modify Wan to duplicate its RTCP packets using SNMP. One would have been motivated to provide such a modification to enhance Wan’s system by utilizing a SNMP as the transmitting protocol for statistical data. SNMP is well known in the art for providing such functionality and it would have been obvious for one of ordinary skill in the art to have used SNMP to improve Wan.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday-Friday [8:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2152

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. C./
Primary Examiner, Art Unit 2152
(temporary partial signatory authority)

/Bunjob Jaroenchonwanit/
Supervisory Patent Examiner, Art Unit 2152

Application Number 	Application/Control No.	Applicant(s)/Patent under Reexamination
	10/664,864	COUTURIER ET AL.
	Examiner DOHM CHANKONG	Art Unit 2152